

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**CLEANUP AND ABATEMENT ORDER NO. 6-98-83  
WDID NO. 6A099812N01**

**Requiring Equilon Enterprises, LLC, to  
Clean Up and Abate the Effects of the Discharge  
of Petroleum Products to the Ground Waters of the  
Lake Tahoe Hydrologic Unit at the South Tahoe Shell Service Station,  
1020 Emerald Bay Road, South Lake Tahoe, El Dorado County**

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The California Regional Water Quality Control Board, Lahontan Region (Regional Board), finds:

1. The South Tahoe Shell Service Station is located at 1020 Emerald Bay Road in South Lake Tahoe, El Dorado County Assessor's Parcel Number 023-411-241. The property contains a gas station and food mart owned by Equilon Enterprises, LLC (a partnership between Shell Oil Company and Texaco).
2. On November 20, 1998, Regional Board staff received laboratory data showing petroleum product contamination of the soil and ground water at the Shell Service Station at 1020 Emerald Bay Road in South Lake Tahoe. Initial groundwater sampling on November 2 and 3, 1998 showed concentrations of gasoline-range petroleum hydrocarbons (TPH-g) up to 48,300 micrograms per liter ( $\mu\text{g/L}$  or ppb) and methyl tertiary-butyl ether (MTBE) up to 30,200  $\mu\text{g/L}$  near the underground storage tanks and dispensers. Subsequent sampling on December 11, 1998 indicated ground water at the northern extent of the property contained 634  $\mu\text{g/L}$  TPH-g, 1.19  $\mu\text{g/L}$  benzene, and 73.1  $\mu\text{g/L}$  MTBE. Other petroleum product constituents in groundwater have included toluene to 183  $\mu\text{g/L}$ , ethylbenzene to 1560  $\mu\text{g/L}$ , and xylenes to 11,900  $\mu\text{g/L}$ . Since mid-December 1998, Equilon has been conducting weekly groundwater extractions from one groundwater monitoring well onsite.
3. The beneficial uses of ground water in the area as designated in the 1995 Water Quality Control Plan for the Lahontan Region include municipal and domestic supply, agricultural supply, fresh water replenishment, and industrial service supply.
4. The 1995 Water Quality Control Plan for the Lahontan Region establishes water quality objectives for the protection of beneficial uses. Those objectives include the following Maximum Contaminant Levels (MCLs) and Action Levels (ALs) that have been established by the California Department of Health Services as safe levels to protect public drinking water supply:

Benzene	1 $\mu\text{g/L}$ (MCL)
Toluene	150 $\mu\text{g/L}$ (MCL)
Ethylbenzene	700 $\mu\text{g/L}$ (MCL)
Xylenes	1750 $\mu\text{g/L}$ (MCL)
MTBE	35 $\mu\text{g/L}$ (AL)

The Water Quality Control Plan contains the following narrative taste and odor objectives for the Lake Tahoe Hydrologic Unit:

Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or that adversely affect beneficial uses. For ground waters designated as municipal and domestic supply, at a minimum, concentrations shall not exceed adopted secondary maximum contaminant levels specified in . . . Title 22 of the California Code of Regulations which is incorporated by reference into this plan.

The following Taste and Odor Thresholds (TOT) are adopted or proposed as secondary water quality goals by the United States Environmental Protection Agency or the California Department of Health Services for drinking water. Petroleum concentrations above these levels would violate the narrative taste and odor objective in the Water Quality Control Plan:

Total Petroleum Hydrocarbons (Gasoline)	50 µg/L (TOT)
Toluene	42 µg/L (TOT)
Ethylbenzene	29 µg/L (TOT)
Xylenes	17 µg/L (TOT)
MTBE	5 µg/L (TOT-proposed)

The more stringent numeric standard is the applicable water quality objective for each constituent.

5. The ground water concentrations of Total Petroleum Hydrocarbons (Gasoline), Benzene, Toluene, Ethylbenzene, Xylenes, and MTBE (Finding No. 2) exceed water quality objectives that are protective of water quality for ground water specified in the 1995 Water Quality Control Plan for the Lahontan Region. The concentrations adversely affect the ground water for its designated uses listed in the 1995 Water Quality Control Plan for the Lahontan Region: municipal and domestic supply, agricultural supply, fresh water replenishment, and industrial service supply. The levels of waste in ground water, therefore, constitute a pollution, as defined in Section 13050 of the California Water Code.
6. The Shell Service Station is approximately 1,100 feet from the South Tahoe Public Utility District's (STPUD's) South Y municipal supply well and approximately 1,300 feet upgradient from the Lukins Brothers No. 3 municipal supply well. STPUD ceased use of the South Y well in August 1998. The South Y Well was used as a backup well due to naturally occurring uranium in the well and because of the threat from pollution from another gasoline station in the area. The Lukins Brothers are not currently using well No. 3 due to the presence of tetrachloroethene (a cleaning solvent) and MTBE (from a nearby gasoline station). Private domestic water wells are also present in the area.
7. The discharge of petroleum products to the ground waters of the Lake Tahoe Hydrologic Unit as described in Finding No. 2, above, violates a prohibition for the Lake Tahoe Hydrologic Unit contained in the 1995 Water Quality Control Plan for the Lahontan Region. Specifically, the discharge violates and threatens to violate the following discharge prohibition in the Plan:

“The discharge of . . . waste as defined in Section 13050(d) of the California Water Code which would violate the water quality objectives of this plan, or otherwise adversely affect the beneficial uses of water designated by this plan, is prohibited.”

8. This enforcement action is being taken by this regulatory agency to enforce the provisions of the California Water Code and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) in accordance with Section 15321, Chapter 3, Title 14, of the California Code of Regulation.

**THEREFORE, IT IS HEREBY ORDERED** that pursuant to California Water Code Sections 13267 and 13304, Equilon Enterprises, LLC, shall clean up and abate the discharge and threatened discharge of petroleum hydrocarbons and other wastes discharged to waters of the State, and shall comply with the provisions of this order:

1. Equilon Enterprises, LLC, shall conduct the investigation and cleanup tasks by or under the direction of a California registered geologist or civil engineer experienced in the area of groundwater pollution cleanup.
2. Equilon Enterprises, LLC, shall not cause or permit any additional waste to be discharged or deposited where it is, or probably will be, discharged into waters of the State.
3. By **January 11, 1999**, commence interim remedial action consisting of continuous groundwater extraction from one or more wells to contain and remediate petroleum product contamination in ground water from the Shell Service Station.
4. By **January 11, 1999**, submit preliminary groundwater analyses data resulting from the initial offsite investigation.

Investigation requirements include the following:

Analyses: Analyses submitted pursuant to the investigation must include TPH-g, BTEX, and gasoline oxygenates including MTBE, TBA, DIPE, ETBE, and TAME. Analyses for oxygenates shall be by EPA Method 8260 or its equivalent. Detection limits for BTEX and oxygenates shall not be greater than 0.5 ppb in aqueous samples and 5 ppb in soil samples. The detection limit for TBA shall not be greater than 5 ppb in aqueous samples and 250 ppb in soil samples. The detection limit for TPH-g shall not be greater than 50 ppb in aqueous samples and 500 ppb in soil samples.

Quality assurance/quality control: QA/QC samples shall include 1) one trip blank per cooler and 2) one equipment blank per piece of sampling equipment (sample bailer, sample pump, etc.); if disposable bailers are used for sampling, one equipment blank shall be submitted from one representative bailer per sampling round. Laboratory QA/QC samples shall be analyzed for TPH-g, BTEX, and MTBE. Confirm positive identifications with GC/MS methods.

Well survey: Groundwater monitoring wells shall be surveyed by a California licensed land surveyor. The survey shall be referenced to the North American Datum of 1927 (NAD27) and the National Geodetic Vertical Datum of 1929 (NGVD29). Groundwater elevations shall be reported in reference to these surveyed data. Groundwater elevation data shall be collected from all wells at and around the site within a three hour period in order to produce comparable data.

5. By **January 22, 1999**, if the boundaries of the contaminant plume are not defined, submit a workplan for additional groundwater investigation to achieve plume definition.
6. By **February 1, 1999**, and by the 1st of **every month thereafter**, collect groundwater elevations from all monitoring wells and extraction wells, and sample the wells for chemical analyses.
7. By **February 15, 1999** and by the 15th of **every month thereafter**, submit (by facsimile) the monitoring well analytical results and groundwater elevations to the Regional Board (results of each monitoring round are to be transmitted to Regional Board staff within fourteen calendar days of sampling).
8. By **March 1, 1999**, submit a technical report to the Regional Board that presents the results of groundwater investigation activities and that includes a Corrective Action Plan (CAP) for permanent onsite remediation; the CAP must also propose offsite remediation of the plume as defined by the investigation even if not fully defined. The report shall include analytical chemistry data, groundwater elevation data, monitoring well construction details, and figures depicting isoconcentrations of TPG-g, benzene, and MTBE, and the extent of free-phase petroleum product, if present. The investigation shall define the vertical and areal extent of petroleum products and gasoline additives that exist in soil and ground water in the area of and surrounding the Shell Service Station property.

Results of the investigation shall include text interpretation of data collected and recommendations for further action that is necessary to define the extent of contamination (including installation of monitoring wells) and to contain and remediate the entire extent of contaminated ground water at and around the site. This report shall also include a summary of work performed and data collected during the current interim remedial action activities (soil and groundwater excavation, or extraction, and testing).

9. By **April 1, 1999** and by the 1st of **every third month thereafter**, submit monitoring reports. The report must contain progress on the cleanup status which demonstrates continued compliance with cleanup actions required by the Regional Board. The reports must include summaries of the on-going monthly groundwater monitoring data to show the concentrations of MTBE, other gasoline product oxygenates, BTEX, and TPH-g, in ground water.

Failure to comply with the terms or conditions of this Cleanup and Abatement Order will result in additional enforcement action, which may include the imposition of administrative civil liability pursuant to Sections 13268 and 13350 of the California Water Code or referral to the

EQUILON ENTERPRISES, LLC  
El Dorado County

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Attorney General of the State of California for such legal action as he or she may deem appropriate.

Ordered by: \_\_\_\_\_ Dated: \_\_\_\_\_  
HAROLD J. SINGER  
EXECUTIVE OFFICER